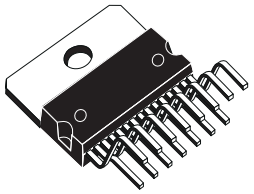
TDA7297

15+15W DUAL BRIDGE AMPLIFIER

- WIDE SUPPLY VOLTAGE RANGE (6V -18V)
- MINIMUM EXTERNAL COMPONENTS
  – NO SVR CAPACITOR
  – NO BOOTSTRAP
  – NO BOUCHEROT CELLS
  – INTERNALLY FIXED GAIN
- STAND-BY & MUTE FUNCTIONS
- SHORT CIRCUIT PROTECTION
- THERMAL OVERLOAD PROTECTION

TECHNOLOGY BI20II



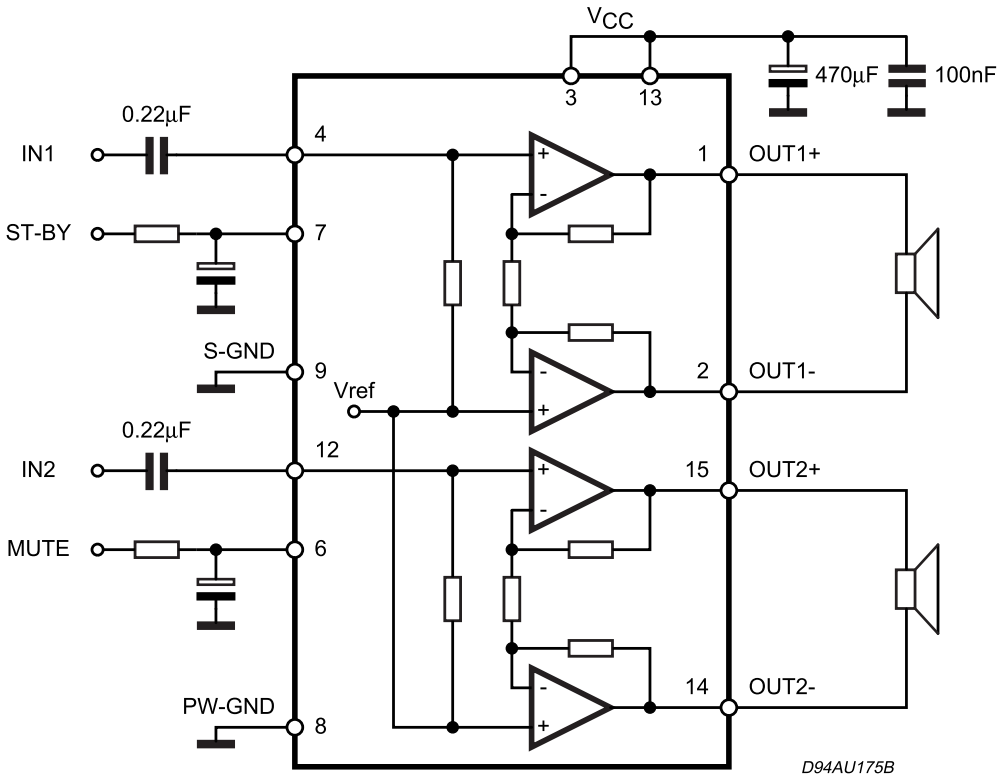
Multiwatt 15

ORDERING NUMBER: TDA7297

DESCRIPTION

The TDA7297 is a dual bridge amplifier specially designed for TV and Portable Radio applications.

BLOCK AND APPLICATION DIAGRAM



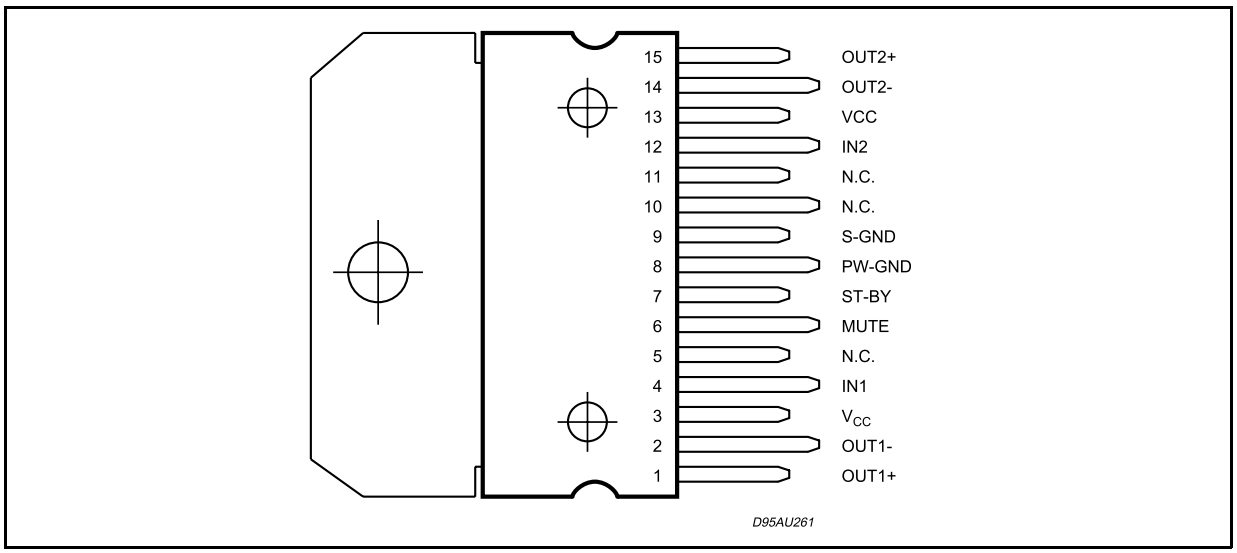
ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_S	Supply Voltage	20	V
I_O	Output Peak Current (internally limited)	2	A
P_{tot}	Total Power Dissipation (T_{case} = 70°C)	33	W
T_{op}	Operating Temperature	0 to 70	°C
T_{stg}, T_j	Storage and Junction Temperature	-40 to +150	°C

THERMAL DATA

Symbol	Description	Value		Unit
$R_{th\ j\text{-}case}$	Thermal Resistance Junction to case	Typ. 1.4	Max. 2	°C/W

PIN CONNECTION (Top view)



ELECTRICAL CHARACTERISTICS (V_{CC} = 16.5V, R_L = 8Ω, f = 1kHz, T_{amb} = 25°C unless otherwise specified.)

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
V_{CC}	Supply Range		6.5		18	V
I_q	Total Quiescent Current	$R_L = \infty$		50	65	mA
V_{OS}	Output Offset Voltage				120	mV
P_O	Output Power	THD = 10%	13	15		W
THD	Total Harmonic Distortion	P_O = 1W		0.1	0.3	%
		P_O = 0.1W to 5W f = 100Hz to 15kHz			1	%
SVR	Supply Voltage Rejection	f = 100Hz V_R = 0.5V	40	56		dB
CT	Crosstalk		46	60		dB
A_{MUTE}	Mute Attenuation		60	80		dB
T_W	Thermal Threshold			150		°C
G_V	Closed Loop Voltage Gain		31	32	33	dB
ΔGv	Voltage Gain Matching				0.5	dB
R_i	Input Resistance		25	30		KΩ